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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.  | CONFIRMATION NO. |
|---|-------------|----------------------|----------------------|------------------|
| 09/513,687  | 02/25/2000  | Yong-Hoon Lee        | 1316.1041/MDS        | 7481             |
| 21171   | 7590        | 01/16/2004           | EXAMINER             |                  |
| STAAS & HALSEY LLP<br>SUITE 700<br>1201 NEW YORK AVENUE, N.W.<br>WASHINGTON, DC 20005 |             |                      | FERGUSON, LAWRENCE D |                  |
|   |             |                      | ART UNIT             | PAPER NUMBER     |
|   |             |                      | 1774                 |                  |

DATE MAILED: 01/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/513,687

Applicant(s)

LEE ET AL.

Examiner

Lawrence D Ferguson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 23 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Amendment***

1. This action is in response to the request for reconsideration mailed October 23, 2003. Claim 3 was amended rendering claims 1-30 pending.

***Claim Rejections – 35 USC § 103(a)***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. (U.S. 5,470,627) in view of Vedamuttu (U.S. 6,165,391).

Lee discloses a double-sided optical storage disk comprising a substrate having a microstructure formed on each side surface, where the microstructure is in the form of grooves (abstract) where grooves are analogous to track guides. Lee discloses, formed on each of the side surfaces from the substrate outward are a reflective layer, dielectric layer, recording layer and transparent protective layer (column 4, lines 27-34). Lee shows hills of a peaked hood shape in figure 4. Lee additionally shows embossed microstructures of one side of the substrate protruding towards the protective layer of the second side of the substrate and narrows towards the protective layer in Figure 4, as amended in instant claim 1. Although Lee does not explicitly disclose the height of

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the peaked hood shape or grooves or the thickness of the protective layer, height and thickness are optimizable. It would have been obvious to one of ordinary skill in the art to optimize the components because discovering the optimum or workable values involves only routine skill in the art. Although Lee does not show the second micro-embossments protruding toward the second protective layer, as in instant claim 7, it would have been obvious to one of ordinary skill in the art to reverse the embossments of Lee as depicted in Applicant's instant Figure 3, because a mere reversal of the essential working parts of a device involves only routine skill in the art. *In re Einstein*, 8 USPQ 167. Lee does not explicitly disclose micro-embossments protruding from the substrate.

Vedamuttu teaches providing micro-embossment(s) on the surface of an optical disc (column 3, lines 66-67). Lee and Vedamuttu are analogous art because they are from the field of optical discs. It would have been obvious to one of ordinary skill in the art to include the micro-embossments of Vedamuttu on the substrate of Lee because Vedamuttu teaches the micro-embossments can visually enhance the disc (column 4 lines 52-54).

### ***Response to Arguments***

4. Remarks in regard to the rejection under 35 USC 103(a) as being unpatentable over Lee et al. (U.S. 5,470,627) in view of Vedamuttu (U.S. 6,165,391) have been considered but are not found persuasive. Applicant argues a prima facie case of obviousness has not been established because the requisite motivation to make the

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asserted combination is not present. Examiner respectfully disagrees because Vedamuttu teaches the micro-embossments can visually enhance the disc (column 4 lines 52-54). Applicant argues Vedamuttu does not supply a teaching or suggestion of embossing a substrate. This is not true because Vedamuttu teaches providing micro-embossment(s) on the surface of an optical disc (column 3, lines 66-67). Applicant further argues Vedamuttu embosses to form a micro-relief pattern for forming a holographic image on the surface of the disc and not to generate track guides. The intended use of the Vedamuttu reference is of little consequence. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). Applicant argues the Office must present a convincing line of reasoning as to why the holographic image generating embossment of the lacquer layer of Vedamuttu should be added to the tracking grooves described in Lee et al. Vedamuttu teaches the conventionality of micro-embossments protruding from the surface of an optical disc and teaches the micro-embossments visually enhance the disc (column 4, lines 52-54) in the form of a holographic image. Applicant argues visually enhancing a disc is not taught by Lee et al. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually

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where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). As previously mentioned, Vedamuttu teaches the conventionality of micro-embossments protruding from the surface of an optical disc and teaches the micro-embossments visually enhance the disc (column 4, lines 52-54) in the form of a holographic image. Applicant argues a merely reversing the tracking grooves of Lee et al. would render the optical media of Lee et al. unsatisfactory for its intended purpose and change the principle operation of Lee et al. Applicant lacks sufficient support for this assertion and has subsequently failed to overcome the *In re Einstein* citation.

### ***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence Ferguson whose telephone number is (703) 305-9978. The examiner can normally be reached on Monday through Friday 8:30 AM – 4:30PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on (703) 308-0449. Please allow the examiner twenty-four hours to return your call.

The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for

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After Final communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-2351.



Lawrence D. Ferguson  
Examiner  
Art Unit 1774

CYNTHIA H. KELLY  
SUPERVISOR  
TECHNICAL STAFF

